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By this amendment, claims 1-39 are pending, in which claim 28 is currently amended, and 39 is newly presented. No new matter is introduced.

The Office Action mailed October 29, 2003 rejected claims 1-38 under 35 U.S.C. § 102 as anticipated by *DeMoney* (US 6,438,630).

Applicants respectfully traverse the outstanding rejection on the merits, because in Applicants' view the claimed invention patentably defines over the applied art, as next discussed.

Independent claims 1 and 29 recite "retrieving a search order table having a plurality of table entries corresponding to M queues that selectively store the packets, the table entries storing values that correspond to relative positions of the M queues and that are selected based upon a transmission constraint of the communication system." Independent claim 11 recites "a memory storing a search order table having a plurality of table entries corresponding to the M queues, the table entries storing values that correspond to relative positions of the M queues and that are selected based upon a transmission constraint of the communication system." Independent claim 21 is directed to a "switching device" and recites "a memory storing a search order table having a plurality of table entries, the table entries storing values that correspond to relative positions of the plurality of queues and that are selected based upon a transmission constraint, wherein the number of queues is M ."

In support of its rejection, the Office Action applies *DeMoney*, citing col. 4: 33-44, for a supposed disclosure of the above claim features. Applicants respectfully disagree with this interpretation, which lacks any factual basis. The cited passage states the following:

The storage manager places requests from continuous media requesters into a earliest deadline ordered queue (the "deadline queue"), and it places prioritized non-guaranteed rate requests into a separate highest priority ordered queue (the "priority queue").

The disk scheduler may also maintains a third list of disk requests. This list has requests ordered by the position of the requested data block on the disk device. This list is referred to later as the "seek reorder queue". The seek reorder queue may have fixed maximum size that is a configurable parameter of the system. Requests from the two queues described above are migrated to this list.

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At best, the above cited passage discloses in strict generalities the use of queues, without any mention of a search order table. The disclosed third list merely maintains an ordering of the requests; this list does not have entries that correspond to the queues. By contrast, the claims positively recite use of "a search order table having a plurality of table entries corresponding to *all* queues." Moreover, the claimed queues store "packets." The queues of the *DeMoney* system store requests, which is required for its proper operation, as described below.

DeMoney discloses a digital video/audio storage and playback system supporting multiple continuous media streams (col. 1: 6-9). A multimedia storage manager may operate by associating a ring of data buffers between the requester of continuous media and the disk subsystem. The number of buffers in the ring may be a function of a contracted guarantee rate of the associated media stream, configurable parameters of the disk scheduling system, and service characteristics of the disk system. (col. 4: 4-10) The system also addresses admission control (e.g. determining if an additional guaranteed rate requestor can be accommodated without impacting service to existing guaranteed rate requesters) and determination of the appropriate number of buffers in a ring for a desired guaranteed stream access rate. (col. 5: 12-18)

Applicants do not understand how the Office Action finds a disclosure of the claimed search order table in the cited passage or, for that matter, anywhere else within the four corners of *DeMoney*. The interpretation that the Office Action adopts is particularly unreasonable with respect to independent claim 21, which is drawn to a "switching device." Surely, the Office Action is not suggesting that video storage manager 206 of the *DeMoney* system is a switching device.

As anticipation under 35 U.S.C. § 102 requires that each and every element of the claim be disclosed in a prior art reference, based on the foregoing, it is clear that *DeMoney* fails to anticipate independent claims 1, 11, 21, and 29.

Because claims 2-10, 12-20, 22-28, and 30-38 depend correspondingly from independent independent claims 1, 11, 21, and 29, they are also in condition for allowance for at least the reasons for the allowability of these independent claims. Furthermore, the dependent claims are also separately patentable on their own merits. For example, dependent claim 2 recites "wherein the transmission constraint in the retrieving step specifies that the packets are to be transmitted to a plurality of destination

nodes that are non-interfering, the communication system being a satellite communication system." The Office Action (page 3) cites to col. 1: 11-20, and col. 10: 9-13 for such a disclosure. Close examination of these passages reveal no such disclosure, or suggestion. Col. 1: 11-20 of *DeMoney* discloses the following (Emphasis Added):

Multimedia or video server systems are used in a variety of applications for the storage and playback of video, audio or other multimedia data streams. For example, multimedia servers may be used for broadcast, cable, satellite or telco solutions to distribute multimedia information to clients or consumers. Professional broadcasters and associated service providers, such as networks and affiliates or cable providers, may employ digital video servers to support high bandwidth multimedia broadcast applications including multi-channel program playout, ad insertion, and digital content management.

DeMoney, on col. 10: 9-13, discloses the following:

Clients may request multimedia streams to be sent on transmission network 208. Transmission network 208 may be a computer network, the internet, a broadcast system or any other suitable transmission medium for multimedia streams.

The above passages offer the generalization that multimedia servers can be used in satellite solutions, and is completely silent on "the transmission constraint in the retrieving step specifies that the packets are to be transmitted to a plurality of destination nodes that are non-interfering," as claimed. Applicants, thus, is left to guess at how the Office Action is supporting its rejection, in direct contravention of 35 U.S.C. § 132, which requires the Director to "notify the applicant thereof, stating the reasons for such rejection." This section is violated if the rejection "is so uninformative that it prevents the applicant from recognizing and seeking to counter the grounds for rejection." *Chester v. Miller*, 15 USPQ2d 1333 (Fed. Cir. 1990). This policy is enshrined in the Manual of Patent Examining Procedure. For example, MPEP § 706 states that "[t]he goal of examination is to clearly articulate any rejection early in the prosecution process so that applicant has the opportunity to provide evidence of patentability and otherwise respond completely at the earliest opportunity." Furthermore, MPEP § 706.02(j) indicates that: "[i]t is important for an examiner to properly communicate the basis for a rejection so that the issues can be identified early and the applicant can be given fair opportunity to respond." Unfortunately, the Office Action has provided a vague reference to seemingly irrelevant passages (Col. 1: 11-20, and col. 10: 9-13) in support of its rejection.

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Turning now to new claim 39, this independent claim is drawn to a "method of forwarding packets via a satellite to a plurality of nodes," and recites "scheduling transmission of the packets stored in a plurality of queues based upon a search order table, wherein the search order table has a plurality of table entries corresponding to the queues, the table entries storing values that correspond to relative positions of the queues." As proffered above with respect to the allowability of independent claims 1, 11, 21, and 29, *DeMoney* fails disclosed the claimed "search order table." Thus, new claim 39 should also be allowed.

Therefore, the present application, as amended, overcomes the rejections of record and is in condition for allowance. Favorable consideration is respectfully requested. If any unresolved issues remain, it is respectfully requested that the Examiner telephone the undersigned attorney at 301-601-7252 so that such issues may be resolved as expeditiously as possible.

Respectfully submitted,



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